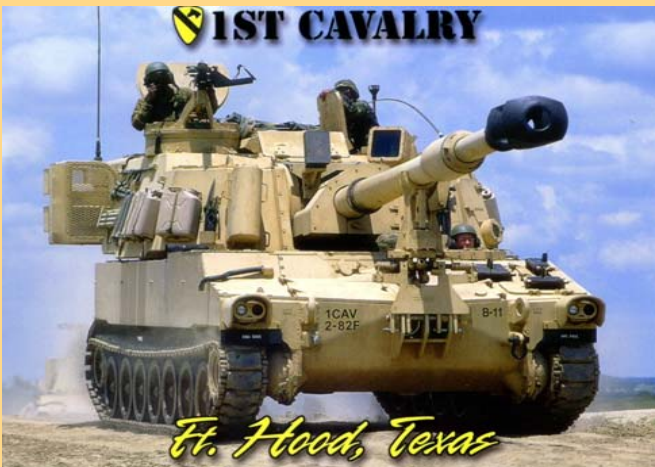
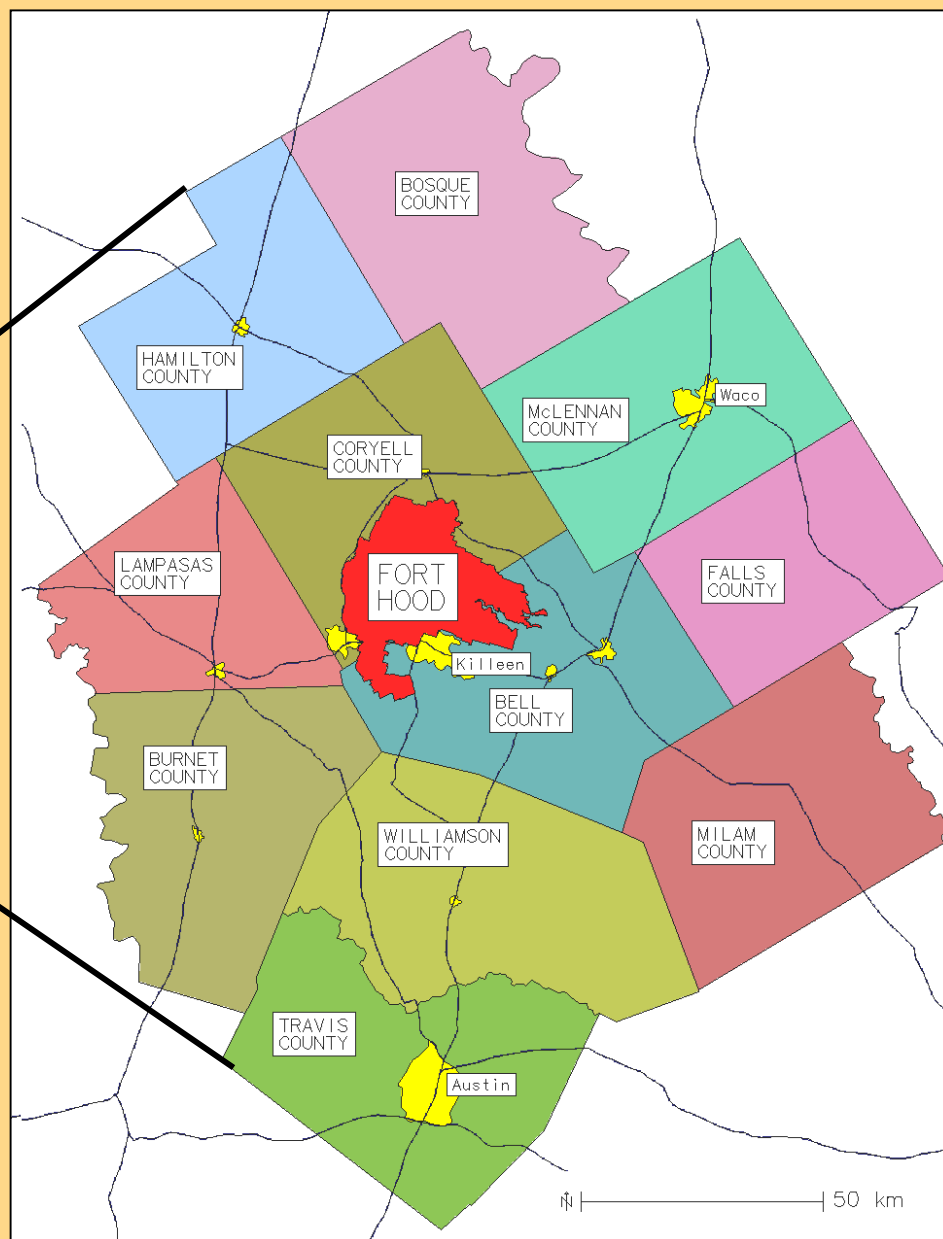
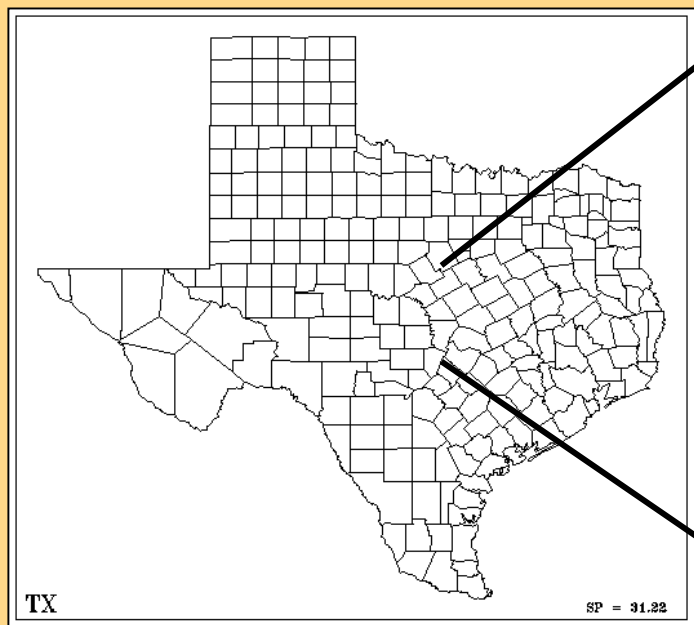




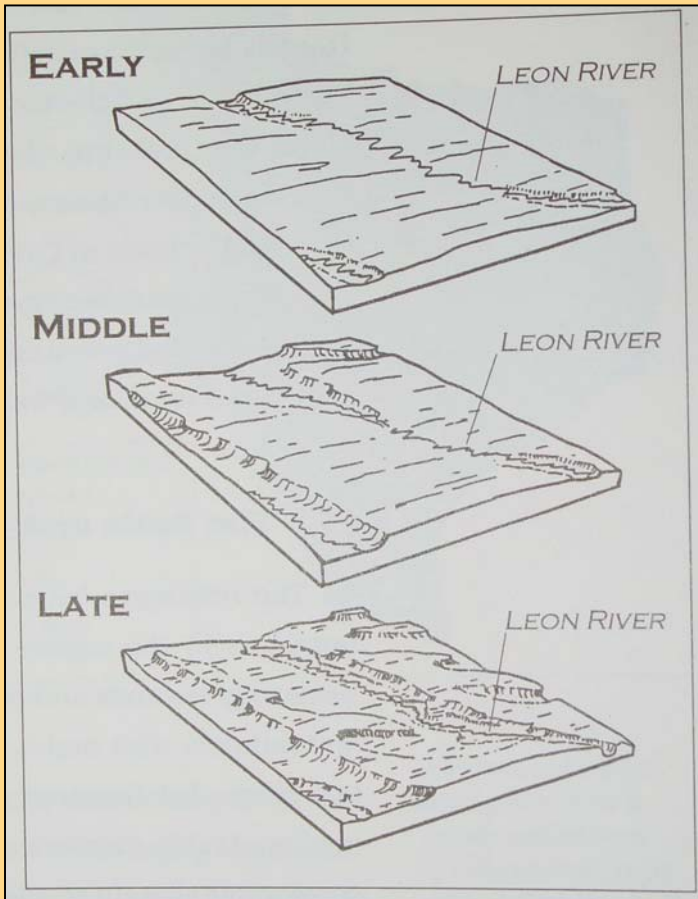
Endangered Species and Military Training at Fort Hood, Texas



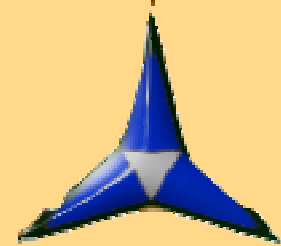
Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
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6. AUTHOR(S)				5d. PROJECT NUMBER	
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14. ABSTRACT					
15. SUBJECT TERMS					
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a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Remnant Plateaus



Military Units



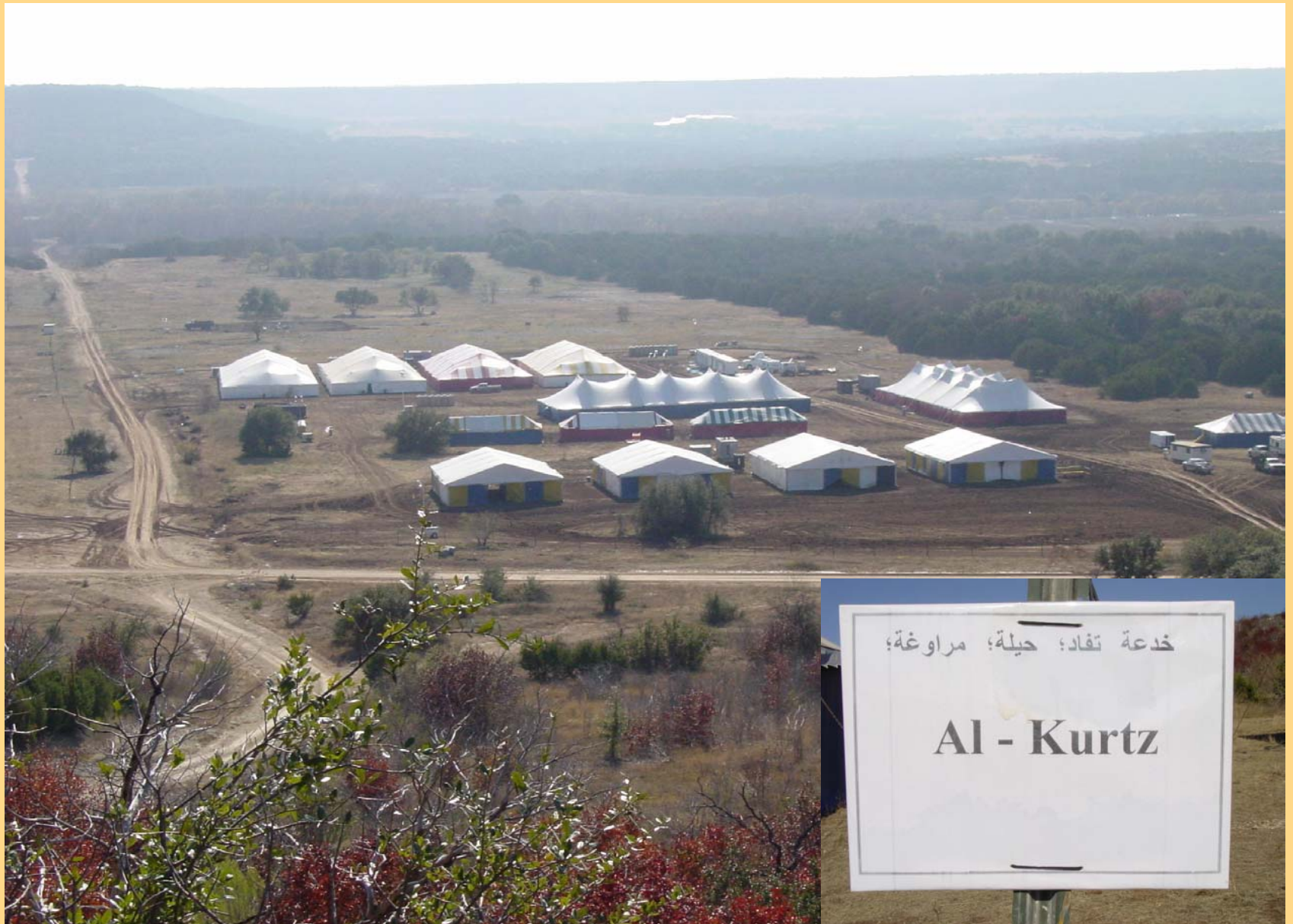
III Armored Corps



4th Infantry Division 1st Cavalry Division

AS THE NATION'S COUNTEROFFENSIVE FORCE, III CORPS TRAINS, MOBILIZES, DEPLOYS, AND SUSTAINS READY FORCES; ON ORDER, CONDUCTS DECISIVE FULL-SPECTRUM JOINT OR COMBINED OPERATIONS.

Iraq training



خدعة تفاد؛ حيلة؛ مراوغة؛

Al - Kurtz

Tactical Weapon Systems

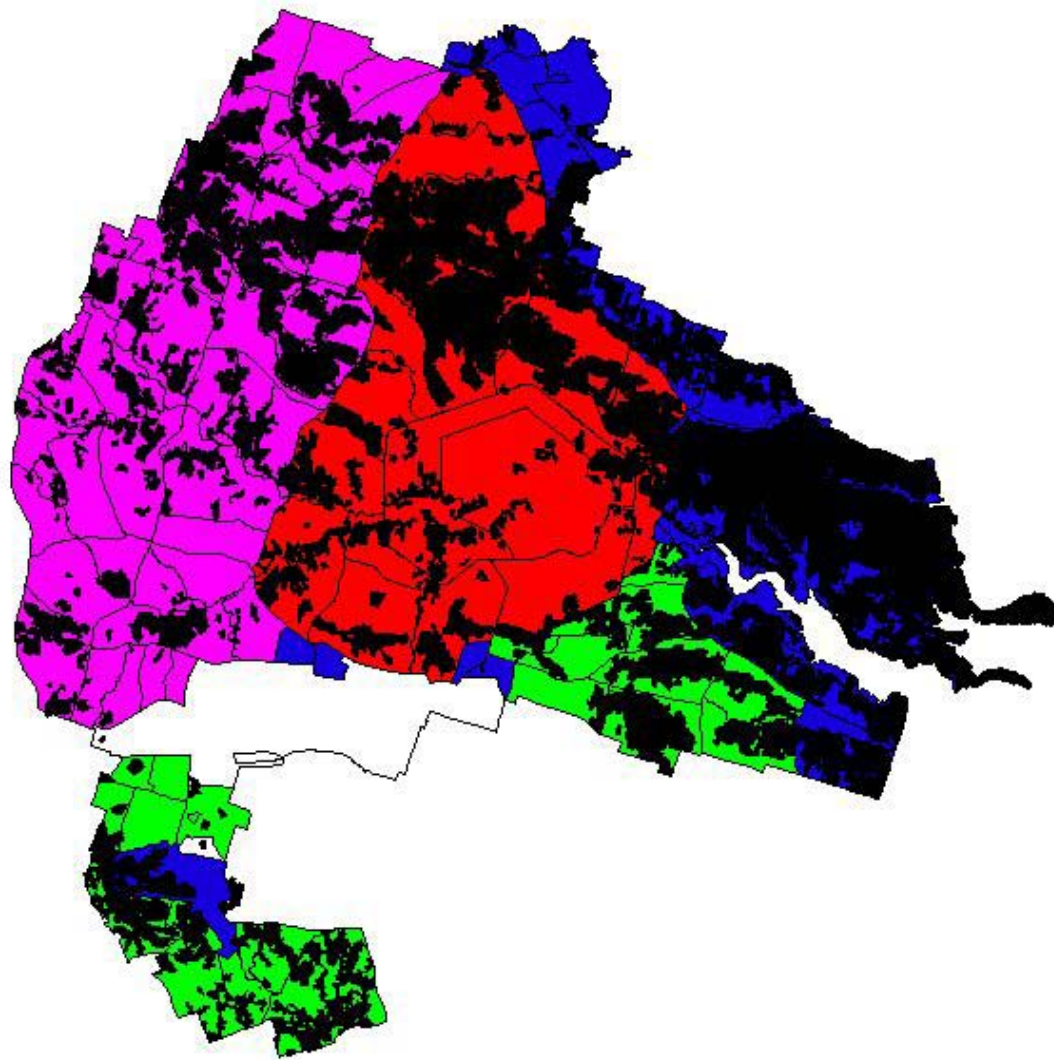


T & E Species



Military Land Use

42 km



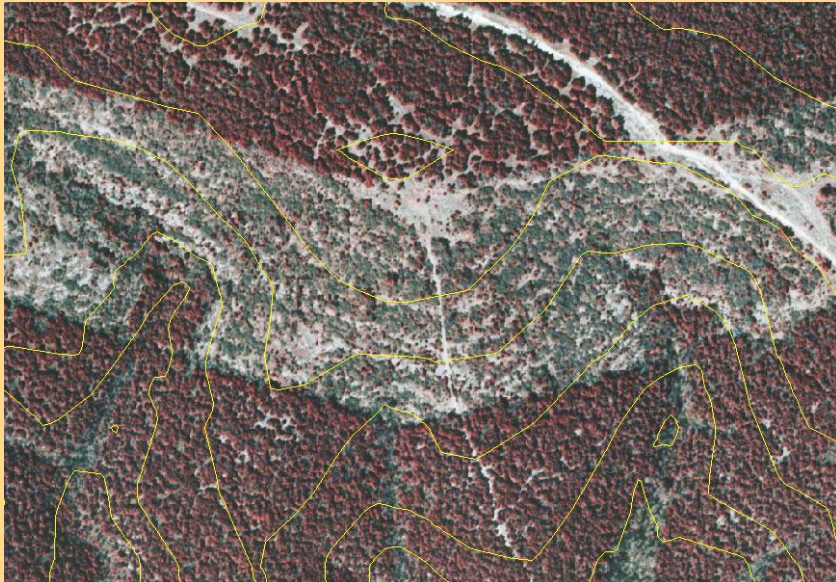
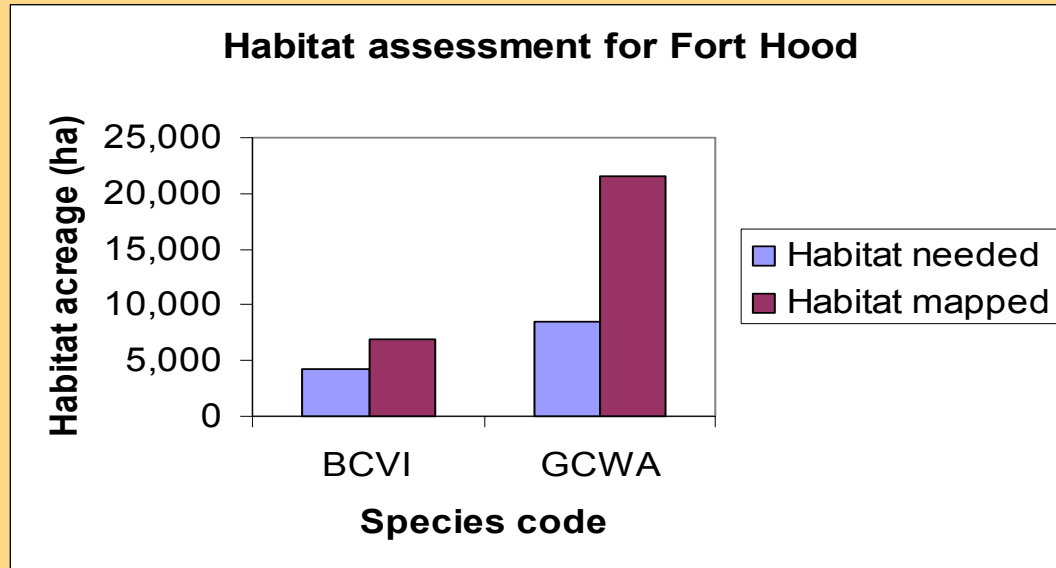
Regulation Hierarchy

- Sections 7 & 9, Endangered Species Act of 1973 as amended
- Biological Assessment
- Biological Opinion
- Military Natural Resources Management Guide (AR 200-3 Ch. 11)
- Endangered Species Management Plan (ESMP)

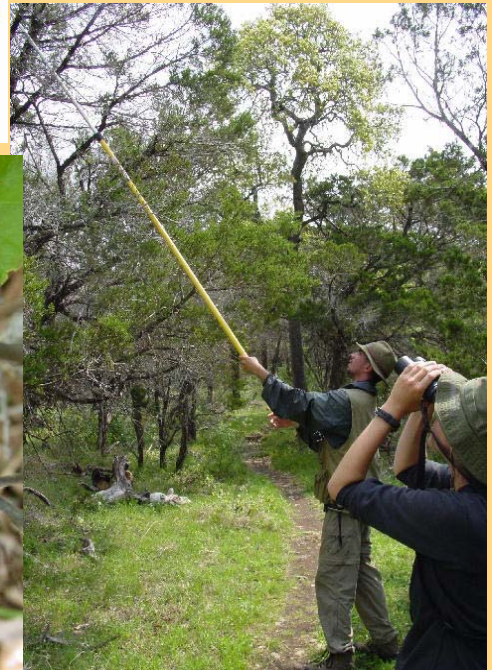
Fort Hood ESMP

- Based on adaptive management principles
- Guideline that implements the Biological Opinion
- Establishes “incidental take” limits based on military impacts
- Establishes conservation objectives for TES

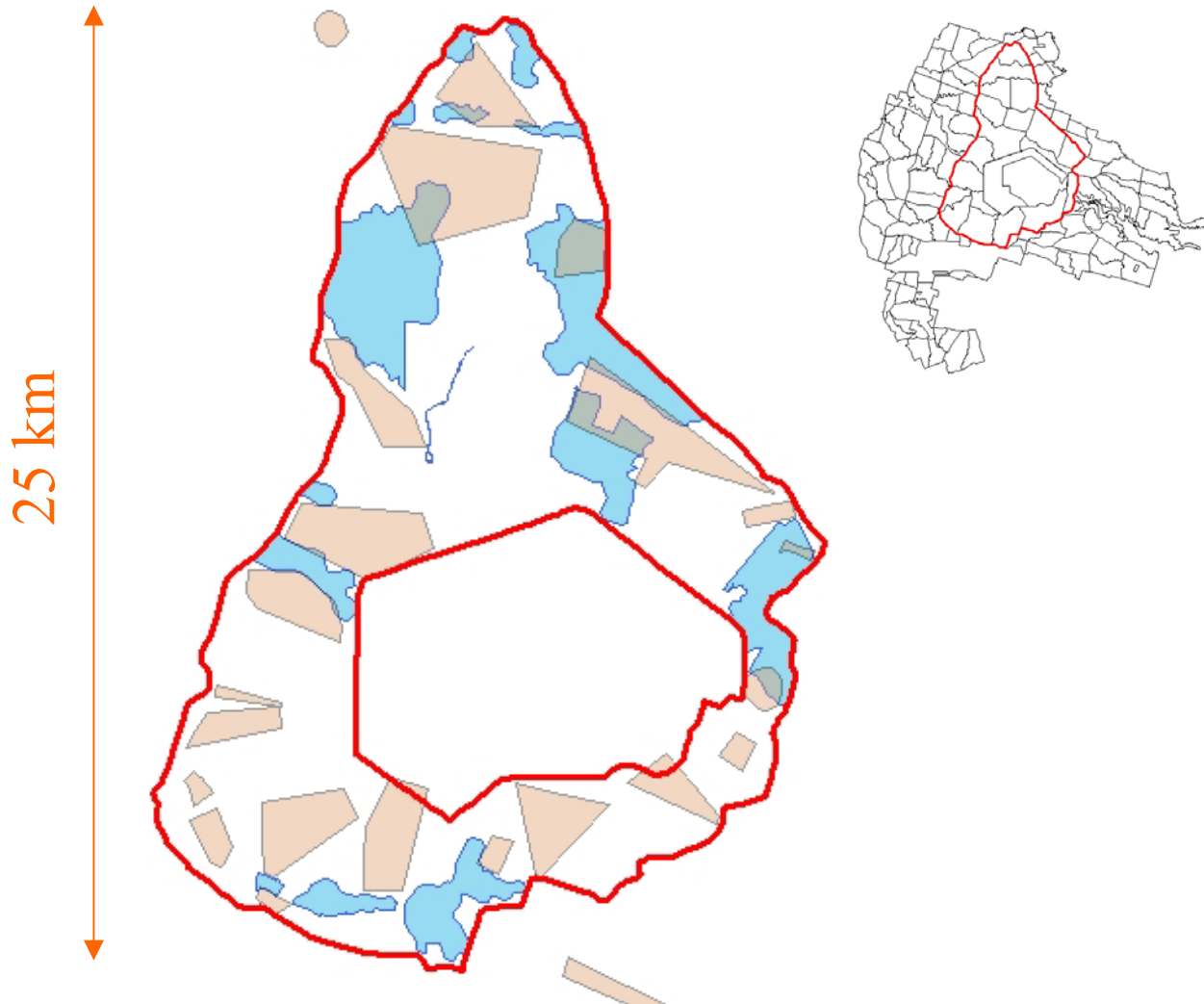
Habitat assessment



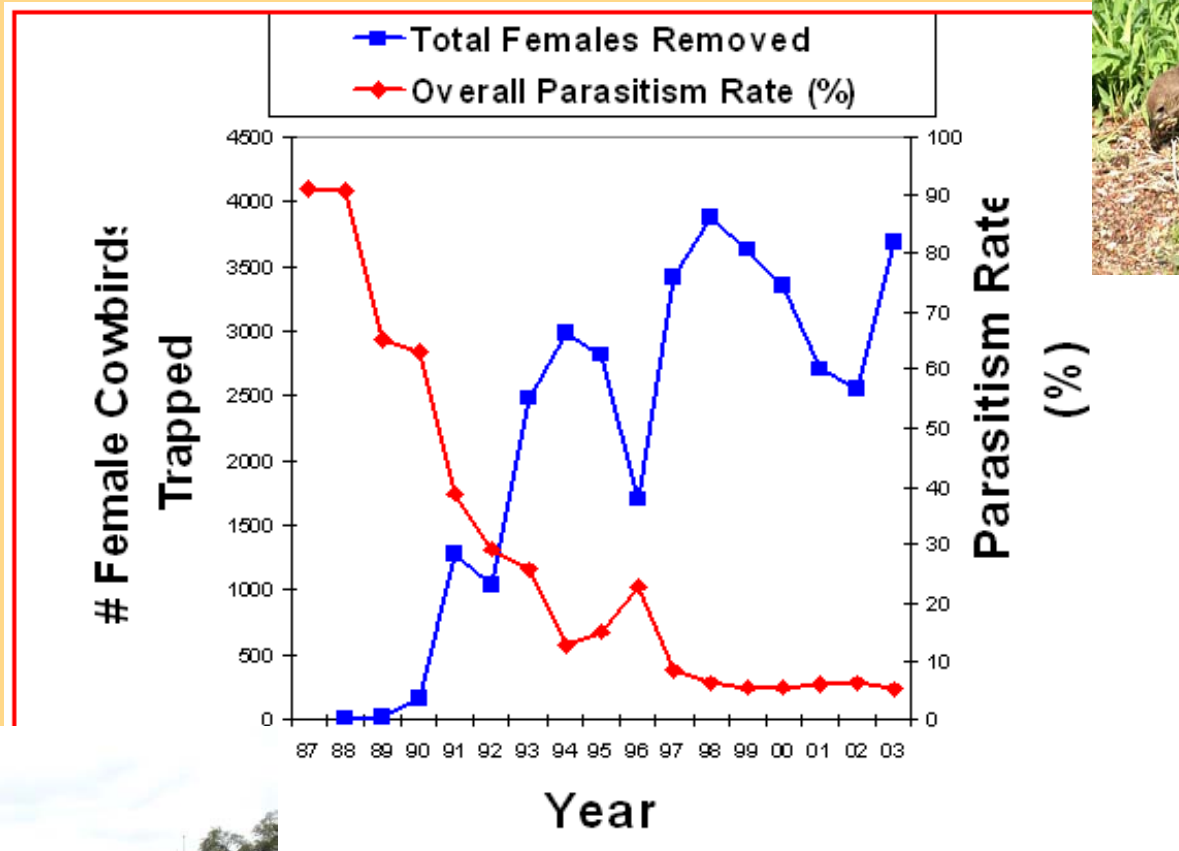
Population monitoring



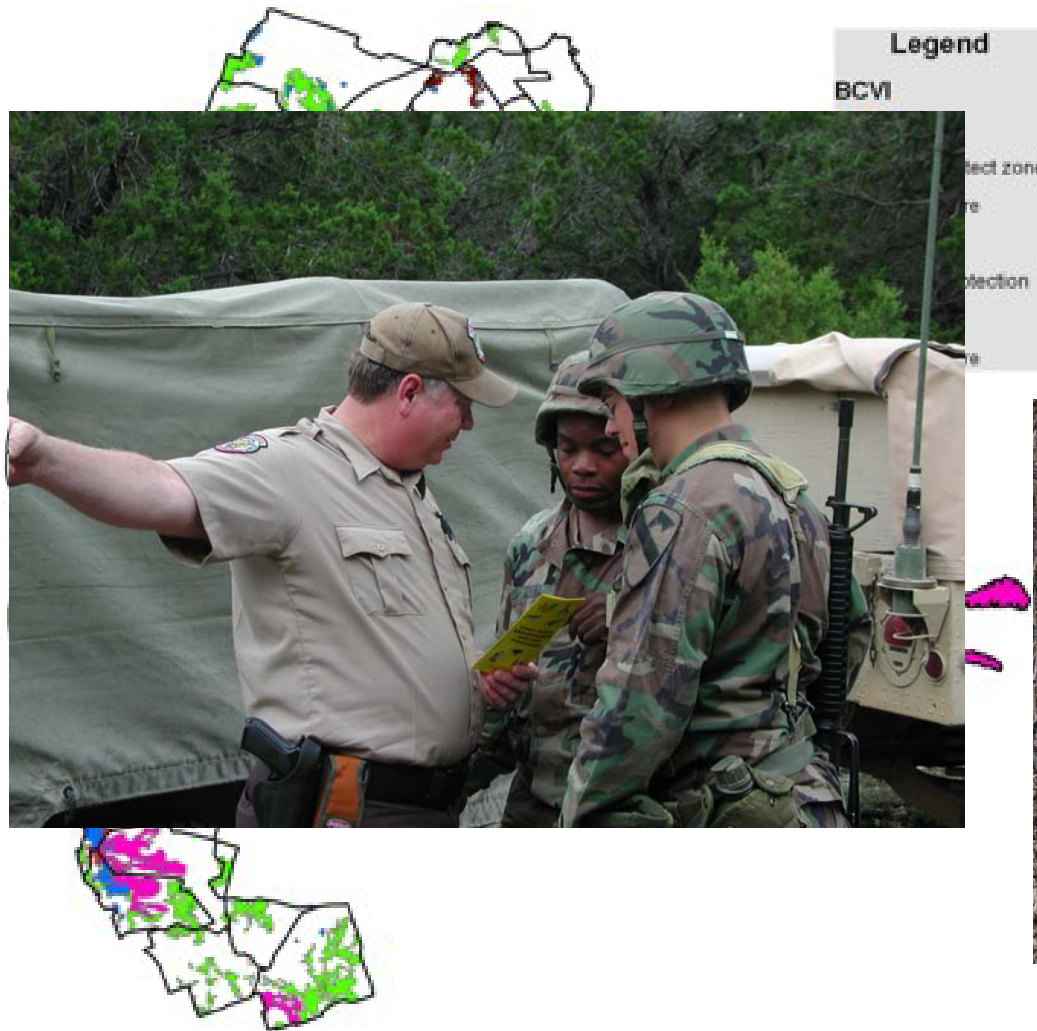
Endangered Species Survey Areas



Cowbird Control



Core and Non-core habitat



Fort Hood Biological Opinion Finding...

Military activities are **NOT**
likely to jeopardize the
continued existence...



Training and GCWA



- Stable, mature forest on steep mesas
- Habitat not conducive to armor maneuver training
- More conducive to dismount company training, observation points, and artillery firing points

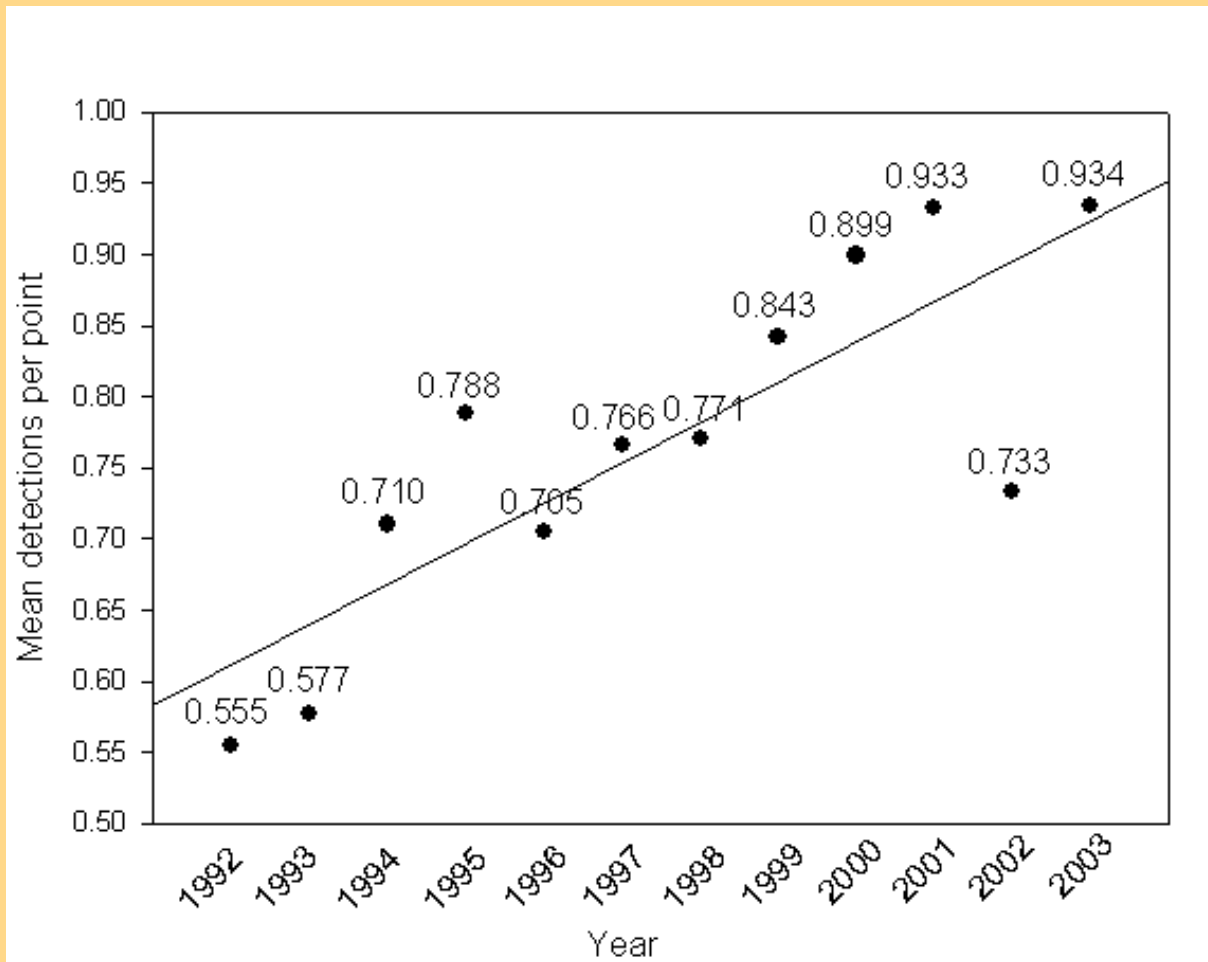


Susceptible to fire

- Protected with firebreaks
- Fire danger rating system
- Fire suppression
- Maintain grassland and shrubland buffers



Population Trend





Training and BCVI



- Early successional, disturbance-dependent shrubland/grassland matrix
- Habitat conducive to armor maneuver, laser, and weapon systems firing training
- MODERATE levels of military training help create and maintain habitat through...

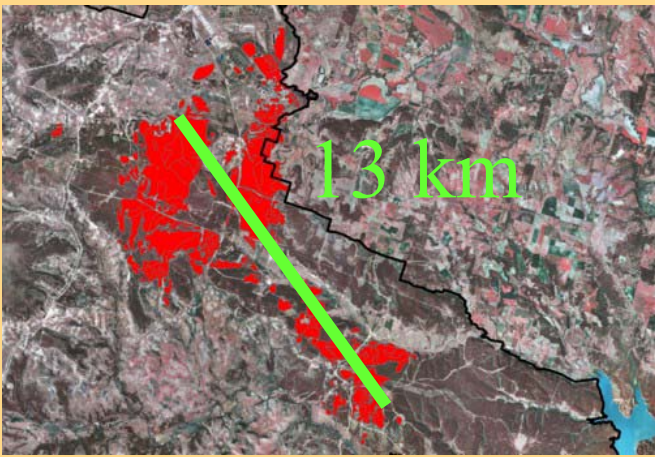
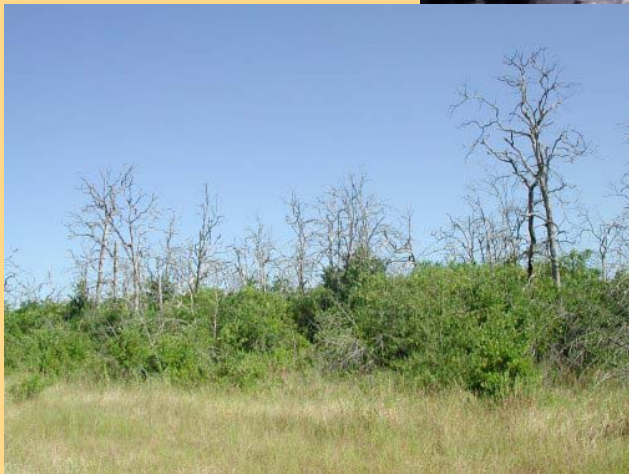
Maneuver training



Wildfire

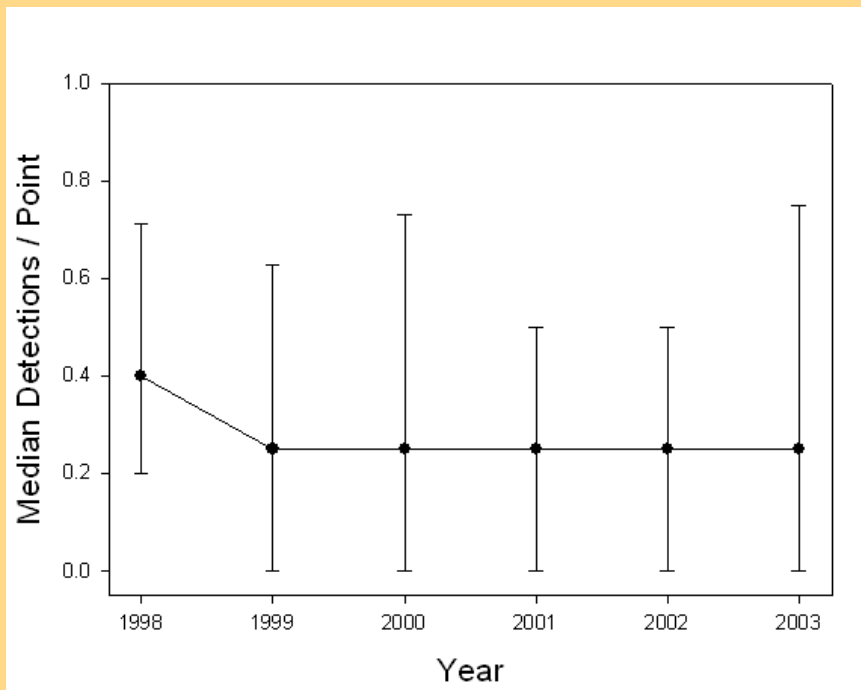


1996

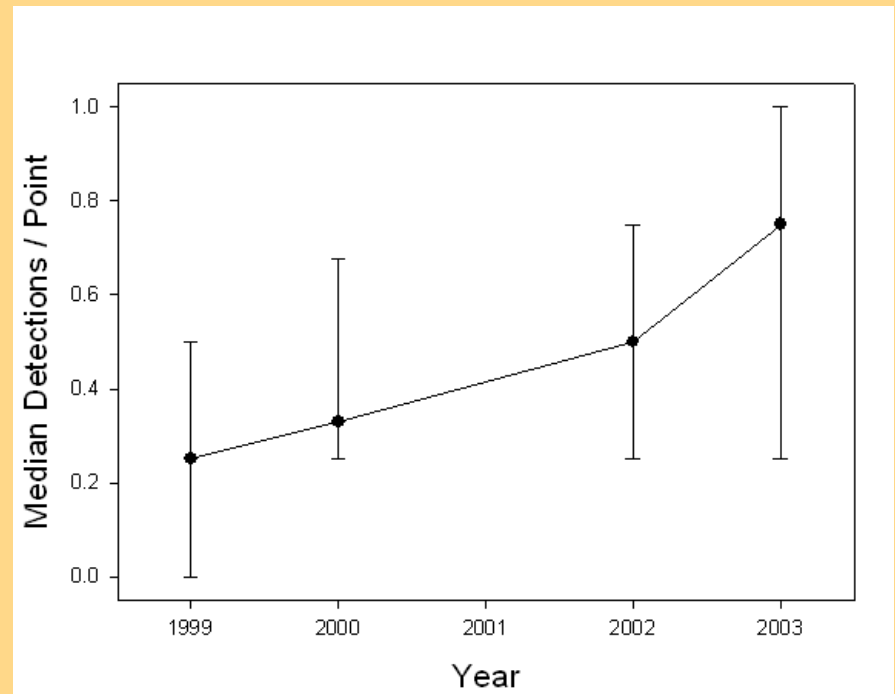


Population Trend

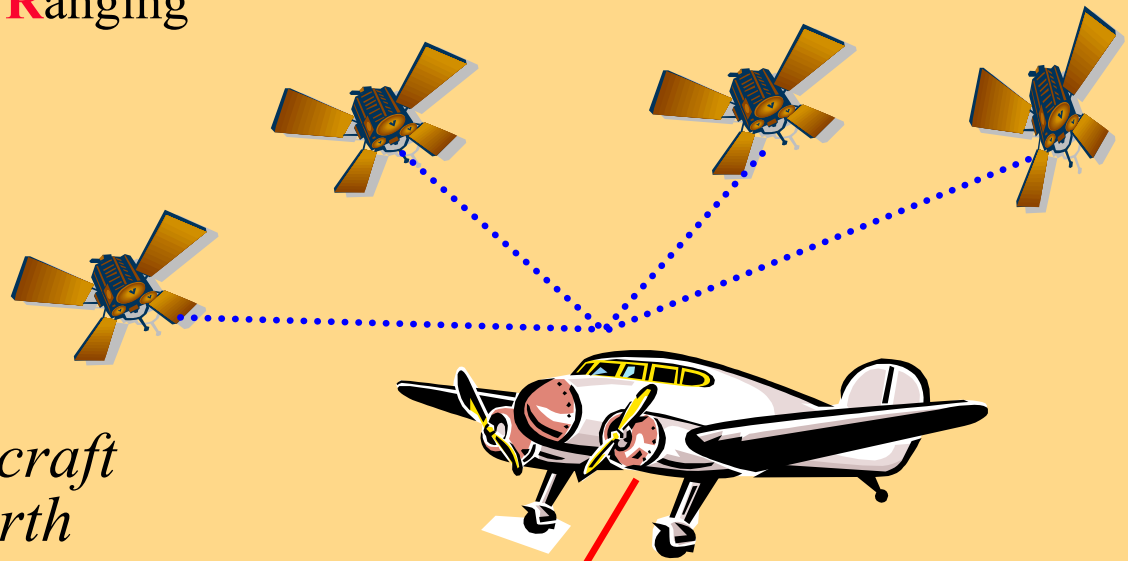
Installation-wide



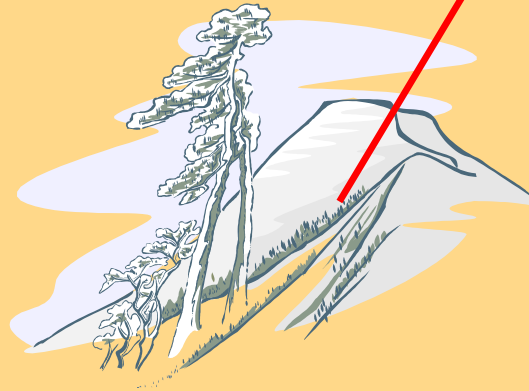
1996 burn area



Airborne **L**ight **D**etection **A**nd **R**anging (**LIDAR**) Systems

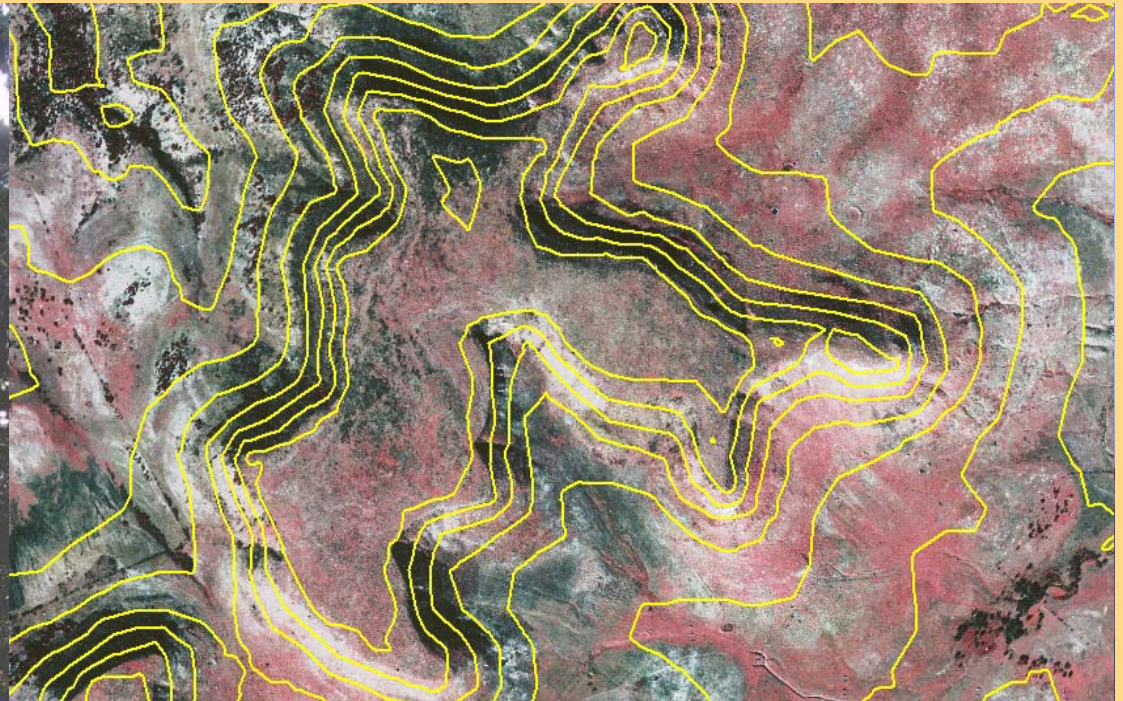


- **Laser** ranging from aircraft
- Measure distance to earth
- GPS for aircraft position
- Internal Measurement Unit (IMU) for aircraft attitude (pitch, roll, and yaw)





CORNELL LAB of ORNITHOLOGY



Microphone array

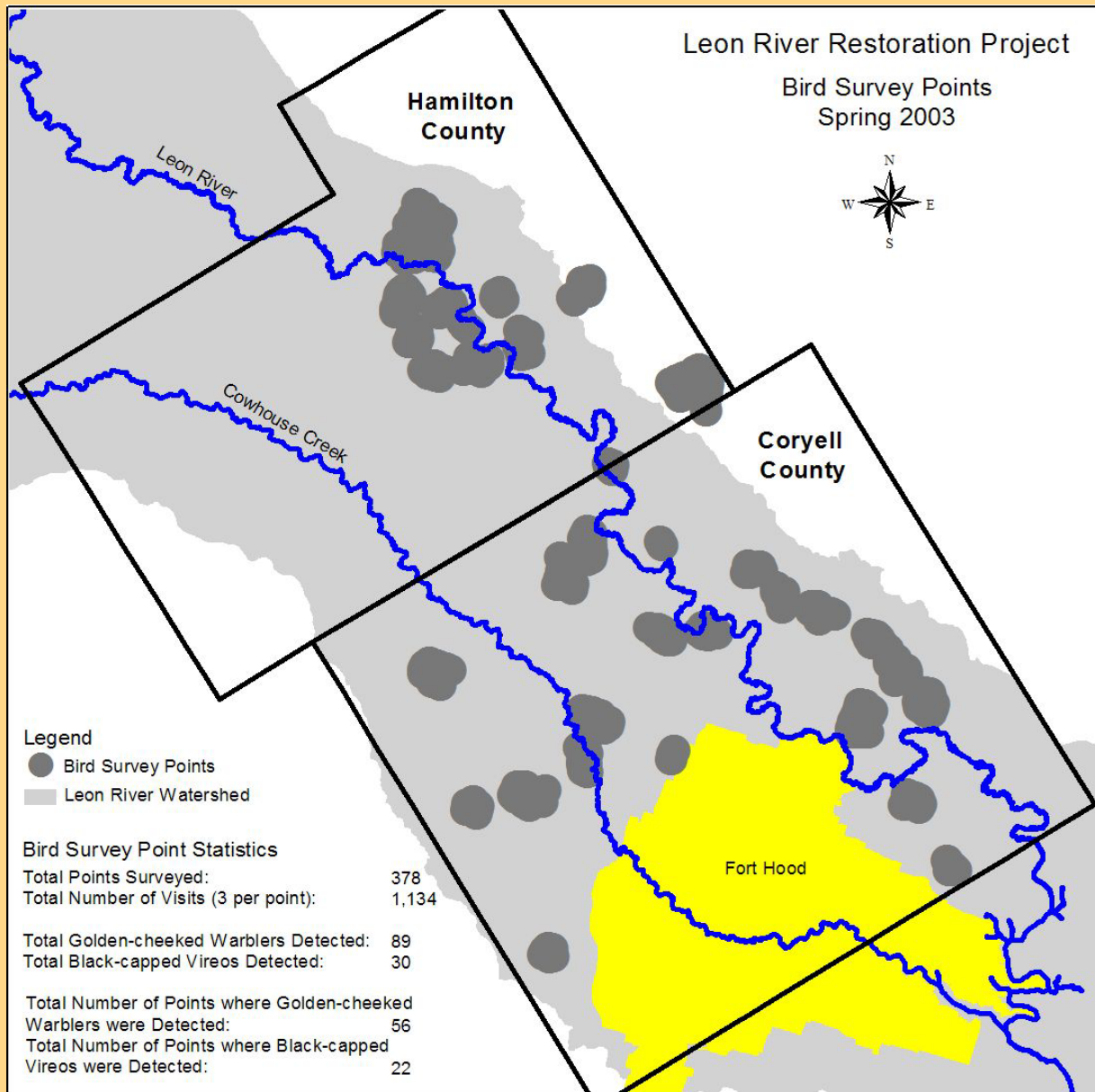
Infra-red Nest Cameras



Blast noise impacts



Off Post Buffers



e

ENVIRONMENTAL DEFENSE
finding the ways that work

The Nature Conservancy



SAVING THE LAST GREAT PLACES ON EARTH

TEXAS
PARKS &
WILDLIFE

Take Home Message

III Armored Corps **IS** maintaining
battle readiness **WHILE** maintaining
endangered species habitat and
populations



Do endangered species restrictions impact mission readiness?



Does military training negatively impact wildlife?

